

AMENDMENTS TO THE CLAIMS

1. (Cancelled)

2. (Currently Amended) A system comprising:

a first ~~register~~ memory location to store a value that represents a maximum number of channels that can be received by an interface;

a second ~~register~~ memory location to store a value that represents a current number of different channels that are being sent to the interface; and

~~a state machine connected to the first and second registers to determine a maximum number of channels that can be received by an interface connected to the system, store the maximum number in the first register, determine a current number of different channels that are being sent to the interface, store the current number in the second register, and detect a new channel message from a set top box connected to the interface, the new channel message to indicate a new subscribed to channel, when the new channel message is detected, the state machine to determine if the maximum number is equal to the current number~~ memory locations, the state machine to:

receive a channel request message from a device connected to the interface, the channel request message to identify a requested channel; and

determine whether the value stored in the first memory location is equal to the value stored in the second memory location each time a channel request message is received from the device.

3. (Currently Amended) The system of claim 2 wherein the state machine ~~furth~~er determines whether the ~~set-top box is currently receiving a previously subscribed to channel~~ device is currently receiving an old channel each time the value stored in the first memory location is determined to be equal to the value stored in the second memory location.

4. (Currently Amended) The system of claim 3 wherein, ~~when the maximum number is equal to the current number, and the set-top box is currently receiving the previously subscribed to channel, the state machine stops a transmission of the previously subscribed to channel~~ the state machine stops transmission of the old channel to the device each time the device is determined to be currently receiving an old channel, and the value stored in the first memory location has been determined to be equal to the value stored in the second memory location.

5. (Currently Amended) The system of claim 4 wherein the state machine ~~outputs the new subscribed to channel after the previously subscribed to channel has been stopped~~ starts transmission of the requested channel to the device after transmission of the old channel to the device has been stopped, and the value stored in the first memory location has been determined to be equal to the value stored in the second memory location.

6. (Currently Amended) The system of claim 3 wherein the ~~set-top box~~ device is a member of a group.

7. (Original) The system of claim 6 wherein, when the maximum number is not equal to the current number, the state machine outputs a group specific query to the group.

8. (Currently Amended) The system of claim 7 wherein the state machine outputs the ~~new-subscribed-to~~ requested channel to the ~~set-top-box~~ device after the group specific query has been output, but before a group specific query timer has expired.

9. (Currently Amended) The system of claim 7 wherein the state machine outputs the ~~new-subscribed-to~~ requested channel to the ~~set-top-box~~ device after the group specific query has been output, and after a group specific query timer has expired.

10. (Currently Amended) The system of claim 3 wherein, when the maximum number is equal to the current number, and the ~~set-top-box~~ device is not currently receiving a ~~subscribed-to~~ channel, the state machine drops the ~~new~~ channel request message.

11. (Cancelled)

12. (Currently Amended) A method of operating a system connected to an interface, ~~the system including a first register and a second register~~; the method comprising:

~~determining a maximum number of channels that can be received by the interface, and storing the maximum number in the first register;~~

~~determining a current number of different channels that are being sent to the interface, and storing the current number in the second register; and~~

~~detecting a new channel message from a set top box connected to the interface, the new channel message indicating a new subscribed to channel, when the new channel message is detected, determining if the maximum number is equal to the current number~~

receiving a channel request message from a device connected to the interface, the channel request message to identify a requested channel; and

determining whether the interface is currently receiving a maximum number of channels that can be received by the interface each time a channel request message is received from the device.

13. (Currently Amended) The method of claim 12 and further comprising determining whether the ~~set top box is currently receiving a previously subscribed to channel~~ device is currently receiving an old channel each time the interface is determined to be currently receiving the maximum number of channels.

14. (Currently Amended) The method of claim 13 and further comprising:

when the maximum number is equal to the current number, and the ~~set-top box~~ device is currently receiving the ~~previously subscribed to old~~ channel,

stopping a transmission of the ~~previously subscribed to channel old channel~~ to the device each time the device is determined to be currently receiving the old channel, and the interface has been determined to be currently receiving the maximum number of channels; and

~~outputting the new subscribed to channel after the previously subscribed to channel has been stopped~~ starting a transmission of the requested channel to the device after transmission of the old channel to the device has been stopped, and the interface has been determined to be currently receiving the maximum number of channels.

15. (Currently Amended) The method of claim 13 wherein the ~~set-top box~~ device is a member of a group, and further comprising, when the maximum number is not equal to the current number, outputting a group specific query to the group.

16. (Currently Amended) The method of claim 15 and further comprising outputting the ~~new-subscribed-to~~ requested channel after the group specific query has been output, but before a group specific query timer has expired.

17. (Currently Amended) The method of claim 15 and further comprising outputting the ~~new-subscribed-to~~ requested channel after the group specific query has been output, and after a group specific query timer has expired.

18. (Currently Amended) The method of claim 13 and further comprising, when the maximum number is equal to the current number, and the set ~~top box~~ device is not currently receiving a ~~subscribed to~~ channel, dropping the channel request message.

19. (Currently Amended) The method of claim ~~11~~ 12 wherein the maximum number of channels represents a maximum number of channels that can be simultaneously received by the interface.

20. (Currently Amended) The system of claim ~~1~~ 2 wherein the maximum number of channels represents a maximum number of channels that can be simultaneously received by the interface.

21. (New) The system of claim 2 wherein the device transmits a leave message to the state machine before transmitting a channel request message to the state machine, the leave message identifying a channel which is no longer to be transmitted to the device.

22. (New) The system of claim 12 wherein before each channel request message is output, the device outputs a leave message, the leave message identifying a channel which is no longer to be transmitted to the device.